## **CLAIMS**

- 1. I claim a designed battery cap called The ACID STRIPPER exclusively for the formation process in battery manufacturing, comprising of a battery cap body with breach lock, gasket insert, inertial spin welded, or hot melt welded, to an outer tube which is inserted with reversing double helix liquid removing device consisting of spiral staircase like ribbons with two helixes that reverse rotational direction. The helixes complete 180° rotation each to complete 360° to form a chamber and consisting of about 12 such interconnected chambers, providing a pathway for the electrolyte fumes towards the exhaust for the gasses on top of the outer tube.
- 2. An ACID STRIPPER as defined in claim 1 to be made of acid resistant thermoplastic material such as polypropylene or poly ethylene suitable for inertia or spin welding.
- 3. An ACID STRIPPER cap as defined in 1 which can readily be distinguished from an end user cap by the presence of ling chimney like tube on top which encloses the liquid separation insert. Such inserts can be any shapes, such balls or discs, that increase the acid mist path and provide the surface to separate the liquid from the gases and drain it back into the battery cells.
- 4. An ACID STRIPPER that is fabricated from the available components in the battery and mixer part used in epoxy and mixing applications, consisting of a battery cap body and a static mixer respectively.
- 5. An ACID MIXER consisting of attached long high internal surface area tube Page 10 of 11

with liquid separation enclosure rising vertically from the battery cap body.

6. An ACID STRIPPER enclosing the reversing double helix liquid removing insert.